

Amendments to and Listing of the Claims:

Please cancel claims 3-4, 11-31, 36-46 and 51-59 and amend claims 1-2, 5-8, 10, 32-35 and 47-50 as follows:

1. (Currently amended) A disk apparatus comprising:
a disk medium capable of recording/playing back data,
a buffer memory for temporarily storing audiovisual data capable of dividing into audiovisual frame units,

21 buffer memory control means for controlling the input/output of said audiovisual data for said buffer memory,

audiovisual frame detection means for detecting audiovisual frame boundaries from said audiovisual data and outputting a frame detection signal,

transmitted/received data amount calculation means for calculating an amount of audiovisual data stored in said buffer memory in frame units on the basis of said frame detection signal,

~~data division~~ frame address management means for ~~dividing~~ performing division management of addresses regarding said audiovisual frame boundaries of said audiovisual data ~~depending on~~ stored in said buffer memory as frame address information in accordance with said frame detection signal and forming the management information of said divided data, and

writing means for writing said audiovisual data on said disk medium in accordance with said frame address information.

2. (Currently amended) A disk apparatus in accordance with claim 1, wherein said audiovisual frame detection means comprises

an audiovisual data comparison means for comparing said audiovisual data with a preset audiovisual frame data pattern,

a frame data amount count means for counting an amount of data to be input to said audiovisual data comparison means in audiovisual frame units, and

a frame detection signal generation means for judging said frame boundaries on the basis of signals from said audiovisual data comparison means and said frame data amount count means, and thereby generating said frame detection signal

~~further comprising data addition means for generating record data packets by adding predetermined data to said audiovisual data in accordance with said management information;~~

~~wherein said writing means writes said record data packets on said disk medium.~~

3. (Cancelled)

4. (Cancelled)

a¹ ~~3.~~ (Currently amended) A disk apparatus comprising:

a disk medium capable of recording/playing back data,

~~a buffer memory for temporarily storing audiovisual data;~~

playback data selection means for selecting said audiovisual data to be output to an external apparatus in audiovisual frame units externally from among said audiovisual data recorded on said disk medium,

reading means for reading said audiovisual data selected by said playback data selection means from said disk medium,

a buffer memory for temporarily storing audiovisual data in audiovisual frame units read from said disk medium,

buffer memory control means for ~~storing~~ controlling input/output of said audiovisual data read from said disk medium ~~[[into]]~~ for said buffer memory, and

stream data ~~generation~~ selection means for generating stream data by ~~combining~~ selecting the data stored in said buffer memory in audiovisual frame units ~~said buffer memory~~ and for externally outputting said stream data continuously.

⁴~~4~~. (Currently amended) A disk apparatus in accordance with claim ³~~8~~,
wherein said stream data ~~generation~~ selection means generates stream data by
combining said audiovisual data in said buffer memory in audiovisual frame units at plural times,
and ~~externally~~ outputs said stream data continuously to an external apparatus.

⁵~~5~~. (Currently amended) A disk apparatus in accordance with claim ³~~8~~,
wherein said playback data selection means selects said audiovisual data to be
output to an external apparatus in audiovisual frame units ~~externally~~ from among said
audiovisual data recorded in said buffer memory, notifies the storage address in said buffer
memory corresponding to said selected audiovisual data to said buffer memory control means,
and
said buffer memory control means selects said audiovisual data for external output
in said buffer memory on the basis of said storage address, outputs said selected audiovisual data.

⁶~~6~~. (Currently amended) A disk apparatus in accordance with claim ³~~8~~,
wherein said playback data selection means sequentially selects said audiovisual
data to be output to an external apparatus ~~externally~~ in audiovisual frame units from among said
audiovisual data recorded on said disk medium, sorts said plural pieces of selected audiovisual
frame data in accordance with the placement sequence on said disk medium corresponding
thereto, and notifies to said reading means,

said reading means reads said audiovisual frame data notified by said playback
data selection means in said placement sequence on said disk medium, and transfers to said
buffer memory control means,

said buffer memory control means stores said audiovisual frame data transferred
from said reading means into said buffer memory in the sequence for ~~external output~~ outputting
to an external apparatus, and

said stream data selection ~~generation~~ means sequentially combines said
audiovisual frame data in said buffer memory in the sequence for ~~external output~~, and ~~outputs~~
externally outputting to an external apparatus.

⁷
~~9.~~ (Original) A disk apparatus in accordance with claim ⁵~~5~~, wherein said playback data selection means thins out and selects said audiovisual data recorded on said disk medium in audiovisual frame units.

⁸
~~10.~~ (Currently amended) A disk apparatus in accordance with claim ⁵~~5~~, wherein said playback data selection means selects said audiovisual data thinned out from said audiovisual data recorded on said disk medium in audiovisual frame units as data to be output to an external apparatus externally, and
said stream data selection ~~generation~~ means generates stream data by combining said audiovisual data in said buffer memory in audiovisual frame units at plural times.

- Q
- 11. (Cancelled)
 - 12. (Cancelled)
 - 13. (Cancelled)
 - 14. (Cancelled)
 - 15. (Cancelled)
 - 16. (Cancelled)
 - 17. (Cancelled)
 - 18. (Cancelled)
 - 19. (Cancelled)
 - 20. (Cancelled)
 - 21. (Cancelled)
 - 22. (Cancelled)
 - 23. (Cancelled)
 - 24. (Cancelled)
 - 25. (Cancelled)
 - 26. (Cancelled)
 - 27. (Cancelled)
 - 28. (Cancelled)
 - 29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

⁹
~~32.~~

(Currently amended) An audiovisual data processing apparatus

comprising:

external disk interface means for controlling record/playback of audiovisual data capable of dividing into audiovisual frame units for a disk apparatus,

external audiovisual apparatus interface means for controlling record/playback of said audiovisual data for an audiovisual apparatus,

a buffer memory for temporarily storing said audiovisual data, disposed between said external disk interface means and said audiovisual apparatus interface means,

buffer memory control means for controlling the input/output of said audiovisual data for said buffer memory,

audiovisual frame detection means for detecting audiovisual frame boundaries from said audiovisual data and for outputting a frame detection signal, and

transmitted/received data amount calculation means for calculating an amount of audiovisual data stored in said buffer memory in frame units on the basis of said frame detection signal,

~~data division~~ frame address management means for dividing and managing addresses regarding in accordance with said audiovisual frame boundaries of the audiovisual data stored in said buffer memory as frame address information in accordance with said frame detection signal, and for forming the management information of said divided data,

writing means for writing said audiovisual data on said disk medium in accordance with said frame address information,

wherein said external disk interface means is configured to transmit said audiovisual data to said disk apparatus in accordance with said frame address management information.

¹⁰
~~33.~~

(Currently amended) An audiovisual data processing apparatus in

accordance with claim ~~32~~⁹, wherein said audiovisual frame detection means comprises

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an audiovisual data comparison means for comparing said audiovisual data with a preset audiovisual frame data pattern,

a frame data amount count means for counting an amount of data to be input to said audiovisual data comparison means in audiovisual frame units, and

a frame detection signal generation means for judging said frame boundaries on the basis of signals from said audiovisual data comparison means and said frame data amount count means, and thereby generating said frame detection signal

further comprising:

data addition means for generating record data packets by adding predetermined data to said audiovisual data in accordance with said management information, and

said writing means for writing said data packets in said disk apparatus.

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(Currently amended) An audiovisual data processing apparatus comprising:

external disk interface means for controlling record/playback of audiovisual data capable of dividing into audiovisual frame units for a disk apparatus,

external audiovisual apparatus interface means for controlling record/playback of said audiovisual data for an audiovisual apparatus,

a buffer memory for temporarily storing said audiovisual data, disposed between said external disk interface means and said audiovisual apparatus interface means,

buffer memory control means for controlling the input/output of said audiovisual data for said buffer memory,

playback data selection means for selecting said audiovisual data to be transmitted to said external audiovisual apparatus interface means in audiovisual frame units from among said audiovisual data recorded in said disk apparatus,

reading means for reading said audiovisual data selected by said playback data selection means from said disk apparatus to said buffer memory via said external disk interface means,

a buffer memory for temporarily storing said audiovisual data in audiovisual frame units read from said disk medium, disposed between said external disk interface means and said audiovisual apparatus interface means,

buffer memory control means for controlling the input/output of said audiovisual data for said buffer memory, and

stream data selection ~~generation~~ means for generating stream data by selecting ~~combining~~ the data stored in said buffer memory in audiovisual frame units ~~and for transmitting said stream data continuously to an external apparatus via said external audiovisual apparatus interface means.~~

¹²
~~35.~~ (Currently amended) An audiovisual data processing apparatus in accordance with claim ¹¹~~34~~,

wherein said playback data selection means selects said audiovisual data thinned out from said audiovisual data recorded on said disk medium in audiovisual frame units as data to be output to an external apparatus, and

said stream data selection means generates stream data by combining said audiovisual data in said buffer memory in audiovisual frame units at plural times.

- 36. (Cancelled)
- 37. (Cancelled)
- 38. (Cancelled)
- 39. (Cancelled)
- 40. (Cancelled)
- 41. (Cancelled)
- 42. (Cancelled)
- 43. (Cancelled)
- 44. (Cancelled)
- 45. (Cancelled)
- 46. (Cancelled)

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47.

(Currently amended) An audiovisual control method comprising:

a step of temporarily storing audiovisual data capable of dividing into audiovisual frame units in a buffer memory,

a frame detection signal generation step of detecting the audiovisual frame boundaries of said audiovisual data and generating a frame detection signal,

~~a step of dividing audiovisual data in accordance with said detected audiovisual frame boundaries, and forming the management information of the divided audiovisual data~~

a step of calculating an amount of audiovisual data stored in said buffer memory in frame units on the basis of said frame detection signal,

a step of performing division management of addresses regarding said audiovisual frame boundaries of the audiovisual data stored in said buffer memory as frame address information in accordance with said frame detection signal, and

a step of transmitting said audiovisual data to a disk medium in accordance with ~~[[said]]~~ management information.

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48.

(Currently amended) An audiovisual control method in accordance with claim ¹³~~47~~, wherein said frame detection signal generation step comprises

a comparison step of comparing said audiovisual data with a preset audiovisual frame data pattern,

a counting step of counting an amount of data to be input to said audiovisual data comparison means in audiovisual frame units, and

a frame detection signal generation means for judging said frame boundaries on the basis of signals generated in said comparison step and said counting step, and thereby generating said frame detection signal

~~further comprising a step of generating record data packets by adding predetermined data to said divided audiovisual data.~~

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49.

(Currently amended) An audiovisual control method comprising:

a reading step of reading selected audiovisual data from a disk medium,

a step of temporarily storing said ~~[[read]]~~ audiovisual data read in audiovisual frame units from said disk medium into ~~[[in]]~~ a buffer memory, and

a step of generating stream data by selecting ~~combining said~~ stored audiovisual data in audiovisual frame units ~~and externally outputting said stream data continuously.~~

Q1 16. (Currently amended) An audiovisual control method in accordance with claim 49,

wherein said audiovisual data recorded on said disk medium is thinned out in audiovisual frame units at said reading step, and

said audiovisual data in said buffer memory is combined in audiovisual frame units at plural times to generate stream data ~~and output~~ at the step of ~~externally~~ outputting said stream data continuously to an external apparatus.

- 51. (Cancelled)
- 52. (Cancelled)
- 53. (Cancelled)
- 54. (Cancelled)
- 55. (Cancelled)
- 56. (Cancelled)
- 57. (Cancelled)
- 58. (Cancelled)
- 59. (Cancelled)